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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,325	09/04/2003	Mark Andreas Van Veen	60013840-2	6112

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EXAMINER

GHATT, DAVE A

ART UNIT PAPER NUMBER

2854

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/655,325	Applicant(s) VAN VEEN ET AL.	
	Examiner Dave A. Ghatt	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-30 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/04/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-13, 15, 19-22, and 28-30 rejected under 35 U.S.C. 102(e) as being anticipated by Wen et al. (US 6,254,230). As shown in Figures 1 and 2, and as outlined in the abstract, Wen et al. teaches the claimed method and apparatus. With respect to claims 1, 4, 5, 11, 12, 13, 15, 16, 17, 19, 20, 21, 22, 28, 29, and 30, Wen et al. teaches a printer device 10 comprising a first recording mechanism (31-34) of a first structural type, either a thermal ink jet or piezoelectric jet with ink supplied from reservoirs 41-44, operable to deliver a first recording material to a recording medium according to a first manner of delivery. See column 2 lines 39-45. Wen et al. also teaches a second recording mechanism 30 of a second structural type different from the first

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structural type, operable to deliver a second recording material to said recording medium according to a second manner of delivery, either a thermal ink jet or piezoelectric jet with ink supplied from reservoir 40. See column 2 lines 48-58. Because the first and second recording mechanisms can be different having different ejection characteristics, and supplied from different reservoirs, Wen et al. teaches the second manner of delivery of said second recording material from said second recording mechanism is substantially different than the first manner of delivery of said first recording material from said first recording mechanism.

With respect to claims 2 and 3, column 3 lines 29-36 teach the print head 30 discharging fluid either simultaneously with the printing passes or after the printing passes, thereby teaching either substantially concurrent delivery and substantially sequential delivery.

With respect to the method steps recited in claims 6-8, these steps are deemed to be inherent in view of the functions of the apparatus discussed above (claims 1-5), because when the apparatus is operated in its intended manner, the recited steps are necessarily performed.

With respect to method claims 9 and 10, insofar as pre-coat and undercoat are broadly defined, Wen et al. teaches the claimed process. As outlined in column 3 lines 29-36, Wen et al. teaches applying a pre-coat 110 followed by applying the second recording material 105 onto the pre-coat 110.

3. Claims 1, 6, 11, 12, 15, 16, 19-21, 24, 28, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kerr et al. (US 6,174,045). As shown in Figure 3, and as outlined in the abstract, Kerr et al. teaches the claimed method and apparatus. With respect to claims 1, 11, 12, 15, 16, 19, 20, 21, 28, and 29, Kerr et al. teaches a printer device 600 comprising a first

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recording mechanism 602 of a first structural type, a thermal inkjet printhead, operable to deliver a first recording material to a recording medium according to a first manner of delivery. See column 7 lines 34-43. Kerr et al. also teaches a second recording mechanism 500, a laser printhead, of a second structural type different from the first structural type, operable to deliver a second recording material to said recording medium according to a second manner of delivery. See column 7 lines 34-43. Because the first and second recording mechanisms are different, one delivering toner and the other ink, Kerr et al. teaches the second manner of delivery of said second recording material from said second recording mechanism is substantially different than the first manner of delivery of said first recording material from said first recording mechanism.

With respect to the method steps recited in claim 6, these steps are deemed to be inherent in view of the functions of the apparatus discussed above (claim 1), because when the apparatus is operated in its intended manner, the recited steps are necessarily performed.

With respect to claim 24, the laser printer of Kerr et al. must include some type of toner cartridge.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al. (US 6,254,230) in view of Tokie (US 6,513,897). As outlined in the above rejections to

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claims 1-13, 15, 19-22, and 28-30, Wen et al. teaches all the claimed structure except for a third recording mechanism as recited. As outlined in the abstract and in column 1 lines 12-28, Tokie teaches a printer device similar to that of Wen et al. Column 2 lines 23-42 teach first and second recording devices that are structurally different with different manners of delivering recording material to recording medium. Column 13 lines 15-39 of Tokie also teaches a third recording mechanism of a third structural type operably associated with the one or more first recording mechanism and the one or more second recording mechanism, the third structural type being different (column 13 line 32) from the first structural type and the second structural type, the one or more third recording mechanism being configured to deliver recording material to the recording medium. To one of ordinary skill in the art, it would have been obvious to include the third structurally different recording mechanism in the apparatus of Wen et al., in order to meet the requirements of a particular application, as taught in column 13 lines 38-39 of Tokie.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al. (US 6,254,230) in view of Silverbrook (US 6,431,704). As outlined in the above rejections to claims 1-13, 15, 19-22, and 28-30, Wen et al. teaches all the claimed structure except for one of the structural types of recording mechanism being an acoustic activation printhead. Silverbrook teaches different types of inkjet printers, including piezoelectric and thermal printers and the obviousness of using an acoustic activation device. See columns 5-6. To one of ordinary skill in the art, it would have been obvious to substitute an acoustic activation device as taught by Silverbrook, into the apparatus of Wen et al., because acoustic activation devices have the

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advantage of being operable without a nozzle plate, as taught by Silverbrook in the table in columns 11 and 12.

7. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerr et al. (US 6,174,045) in view of Warther et al. (US 6,769,718). As outlined in the above rejections to claims 1, 6, 11, 12, 15, 16, 19-21, 24, 28, and 29, Kerr et al. teaches all the claimed structure except for a structural type of recording mechanism that is a dot matrix printer, a lithographic printer, or a gravure printer. Warther et al. teaches a printed sheet product and a method of printing. Column 11 lines 43-65 of Warther et al. teach the interchangeability of printing processes, including lithographic, dot matrix, and gravure printing. To one of ordinary skill in the art, it would have been obvious to substitute for the laser printer, either gravure, lithographic, or dot matrix printing in the apparatus of Kerr et al. as taught by Warther et al. because gravure, lithographic, and dot matrix printers are conventionally used in these processes, providing known benefits, such as improved quality and resolution.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The applicant's attention is invited to the patents to Paranjpe (US 5,611,629 teaching a method and apparatus for printing using a printer with structurally different recording devices) and Koo (US 5,785,435 teaching simultaneous and sequential printing with using a printer with structurally different recording devices).

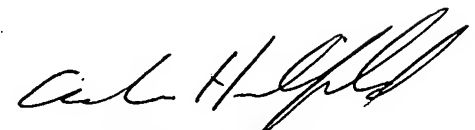
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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave A. Ghatt whose telephone number is (571) 272-2165. The examiner can normally be reached on Mondays through Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAG



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